

**BASIS FOR THE AMENDMENT**

Claims 1, 21, 22, 25 and 26 are canceled.

Claims 23 and 24 are independent. The remaining claims depend directly or indirectly on Claims 23 and 24.

New Claims 27-31 have been added as supported by the claims as originally filed.

No new matter is believed to have been added by entry of this amendment. Entry and favorable reconsideration are respectfully requested.

Upon entry of this amendment Claims 2-20, 23 and 24, 27-31 will now be active in this application. Claims 5-8 and 13-16 stand withdrawn from consideration.

**REMARKS**

Applicants wish to thank Examiner Steele and Examiner Cole for the helpful discussion on December 4, 2008. It was noted that Claim 23 and 24 are not anticipated by Toray et al. Further, since Claims 23 and 24 specifically state that the fiber is exclusively made from PVA, the data are commensurate in scope with Claims 23 and 24 because they show exclusively PVA. Accordingly, these claims are not obvious over Toray, and Ueda and the claims should be allowable.

Applicants respectfully request reconsideration of the application, as amended, in view of the following remarks.

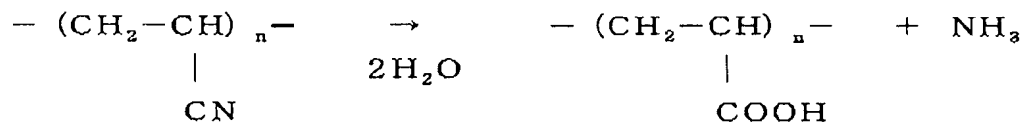
Since Claims 1 and 21 are canceled and the remaining independent claims are Claims 23 and 24, all rejections of record are moot with the exception of the rejection of Claims 23 and 24 over Toray, and Ueda. See pages 6 and 7 of the Office Action. This rejection is traversed.

In **Claims 23 and 24** the fibers consist of polyvinyl alcohol.

In contrast, in Toray, a blend of polyvinyl alcohol, polyacrylonitrile and acrylonitrile vinyl alcohol graft copolymer is dissolved in a solvent and spun and drawn to give fibers. Thus, the claimed polyvinyl alcohol fibers of the present invention cannot be anticipated by the fibers containing a polymer blend as disclosed in Toray.

The Examiner has agreed that Toray discloses the use of only polyvinyl alcohol (see page 6 of the Office Action, line 7 from the bottom.)

Moreover, Toray discloses the use of acrylonitrile which is detrimental to the hydrolysis resistance of the fibers of Toray.



However, the **claimed fibers** of the present invention are **hydrolysis resistant** and **hydrolysis as in the fibers of Toray does not occur**.

Further, acrylonitrile is excluded from Claims 23 and 24 due to the use of “consisting of”. Since Toray uses acrylonitrile, it teaches away from the use of hydrolysis resistant fibers. Moreover, Ueda discloses the use of **water-soluble** PVA fibers. Note that Ueda discloses **underwater disintegrable fiber materials**. See, for example, col. 1, lines 50 to col. 2, line 19. Thus, even the combination of Ueda with Toray cannot result in or render obvious the present invention.

Further, the examples in the specification show that excellent fibrillability, hydrophobicity, chemical resistance and wiping potency are obtained using the claimed fiber of the present invention. Table 1 below is copied from page 14 of the specification.

In support of the above argument Applicants previously provided JP 9059872 and a translation thereof (both filed by IDS). At page 7, paragraph [0049], Example 1, it is disclosed that acrylonitrile is hydrolyzed with sodium hydroxide. However, the Examples of the present invention show that the fibers of the present invention are resistant to sodium hydroxide. See Table 1 below “Chemical Resistance”. The “dissolution” is measured after dipping in sodium hydroxide for 8 hours and is very small. (See page 10, lines 9-15 of the

specification for the experimental procedure for determining the dissolution in sodium hydroxide).

**Thus, the fibers of the present invention have a good hydrolysis resistance and are different from the fibers of Toray and the fibers of Ueda or a combination thereof.**

Table 1

	Cross-Sectional Profile	D ( $\mu\text{m}$ )	L/D	Fibrillability Microscopic Observation	Hydrophilicity		Chemical Resistance		Wiping Potency	
					Water-Absorbing Speed (mm/5 min)	Result	Dissolution (%)	Result	Residue after Wiping (%)	Result
Example 1	flattened	3	15	good	124	good	<1	good	4.0	good
Example 2	flattened	3	21	good	128	good	<1	good	3.1	good
Example 3	flattened	3	25	good	123	good	<1	good	5.0	good
Comparative Example 1	flattened	3	4	not good	125	good	<1	good	14.8	not good
Comparative Example 2	cocoon-shaped	-	-	not good	111	good	<1	good	15.1	not good
Comparative Example 3	rounding	-	-	good	98	not good	19	not good	9.8	not good

As stated at page 15, 1<sup>st</sup> paragraph of the specification:

The PVA fibers of the present invention may be readily split into single fibers, when having received shear force applied thereto. They can be readily fibrillated without compromising the physical properties such as the chemical resistance, the hydrophilicity the weather resistance and the tenacity thereof. The fibrillated fibers may be formed into dry-process or wet-process nonwoven fabrics. In addition, the dry-process and wet-process nonwoven fabrics formed of the fibrillated fibers of the present invention are superior to those formed of conventional fibrillated fibers in point of the water absorbability and the wiping potency thereof. Further, when the fibrillated PVA fibers of the present invention are sheeted along with a cement slurry, then they may form wet-process slates. When the fibers of the present invention are kneaded with plastic or rubber, then they may form plastic or rubber products reinforced with the fibrillated PVA fibers.


The excellent properties of the claimed PVA fibers having the claimed dimensions is not disclosed or suggested in Toray, and Ueda.

Therefore, the rejection of the claims over Toray and Ueda are believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of this rejection is respectfully requested.

This application presents allowable subject matter, and the Examiner is kindly requested to pass it to issue. Should the Examiner have any questions regarding the claims or otherwise wish to discuss this case, he is kindly invited to contact Applicants' below-signed representative, who would be happy to provide any assistance deemed necessary in speeding this application to allowance.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.  
Norman F. Oblon

  
Kirsten A. Grueneberg, Ph.D.  
Registration No.: 47,297

Customer Number  
**22850**

Fax: (703) 415-2220  
NFO:KAG:  
(OSMMN 01/07)